HOW DO YOU PROVE ART IS HUMAN-MADE?

The Human-Made Art Standard

HMAS Version 1.0

FatbikeHero

Tendai Frank Tagarira

March 2026

https://www.fatbikehero.com/p/hmas

Part of the FatbikeHero Framework

ABOUT THE AUTHOR

FatbikeHero is the artistic pseudonym of Tendai Frank Tagarira (b. 1983), a Zimbabwean-born, Denmark-based theoretical artist, author, and filmmaker.

Tagarira received the Special Jury Prize at the Nice International Film Festival (2012) for *A Can of Worms*. Following critical writings on the Mugabe regime, he was exiled to Denmark, where he has lived and worked since 2010. He is the originator of Metadata Expressionism, Semantic Infrastructure Art, the Human API concept, Ghost Attribution, and the Human-Made Art Standard.

He works entirely by hand. No generative AI is used at any stage of his artistic practice. His work is archived at multiple independent repositories.

PART OF THE FATBIKEHERO FRAMEWORK

This book is one of several publications produced within the FatbikeHero framework of Metadata Expressionism and Semantic Infrastructure Art. The foundational framework book is available for free download:

The FatbikeHero Framework: Semantic Infrastructure, Human Authorship & AI-Critical Art

Download (free): https://archive.org/details/fatbike-hero-framework-book
Zenodo DOI: https://doi.org/10.5281/zenodo.18841184
Canonical page: https://www.fatbikehero.com/p/book

That book introduces the complete framework: Metadata Expressionism, Semantic Infrastructure Art, the Human API, Ghost Attribution, Semantic Citizenship, and all 29 fh: namespace concepts. This book — the HMAS — is the framework's entry point concept, developed as a standalone work for artists who need the verification framework without the full theoretical architecture.

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PREFACE

The Question

This book began with a single question asked by artists, institutions, and collectors across the world, in different languages, under different pressures, arriving at the same point:

“How do you prove that art is human-made?”

Before 2024, the question rarely arose. Visual art was produced by humans. The question of whether a given work was human-made was not, in practice, a question that required systematic answering. You could look at the artist. You could visit the studio. The history of the object provided its own evidence.

That has changed.

Generative AI systems now produce images that are visually indistinguishable from hand-made work. The change happened faster than institutions expected, faster than legal frameworks adapted, and faster than artists in most of the world were given the tools to respond.

The question is now structural. It will not go away. It will intensify.

This book is a response to that structural question. Not a legal response. Not a technological solution. A conceptual one: a framework that any artist, anywhere, can apply to their own practice — without registration, without institutional permission, without fee.

The Human-Made Art Standard (HMAS) defines what it means for art to be human-made in terms that are legible to human readers, machine systems, archives, institutions, collectors, and courts.

It is built on three things every artist already has: the capacity to declare, the capacity to leave a trace, and the capacity to document.

Tendai Frank Tagarira (FatbikeHero)

Vorre-Skødstrup, Aarhus, Denmark — March 2026

01

The Problem

What changed, and why it matters to every artist alive today

In 2022, a painter in Berlin submitted work to an open call. The selection committee, using a new AI-assisted screening tool, flagged two of her pieces as likely AI-generated. They were not. She had made them by hand over six weeks. The tool had identified statistical patterns in her color use that matched certain generative outputs. She was rejected. There was no appeal process. There was no framework for demonstrating human authorship that the committee would have recognized.

This story is not exceptional. It is becoming ordinary.

The proliferation of generative AI image systems — Midjourney, Stable Diffusion, DALL-E, Firefly, and their successors — has created a condition that did not previously exist in the history of visual art: a class of visual outputs that are computationally indistinguishable from handmade work.

What Is Actually at Stake

For **artists**: the capacity to claim credit for original work is under structural threat. Not because anyone is deliberately stealing credit, but because the systems through which cultural credit now circulates do not have a reliable mechanism for distinguishing human-made from machine-made unless someone builds that mechanism deliberately.

For **museums and archives**: provenance has always been central to institutional authority. A museum that cannot verify whether a donated work was made by a human or generated by a machine cannot fulfill its basic institutional function. The question is not whether this will matter — it already does.

For **collectors**: the market for human-made art depends on the verifiability of human authorship. A collector paying a premium for handmade work is paying for something specific. That specificity needs documentation that outlasts the artist, the studio, and the gallery relationship.

For **researchers**: studies of human creativity, labor, artistic process, and embodied cognition require the ability to identify human-made work reliably. Without a standard, these fields cannot trust their samples.

For **copyright law**: multiple jurisdictions are moving toward positions in which AI-generated outputs do not qualify for copyright protection in the same way human-made works do. Artists who cannot prove human authorship may face challenges to their own rights in their own work.

For **AI training datasets**: the systems generating AI art are trained on human-made work. As AI-generated images flood the web, future training datasets risk becoming contaminated — producing a degradation loop. Identifying and preserving human-made work in accessible archives requires a verification standard.

The Specific Gap

There are many things that exist for this problem: discussions, guidelines, disclosure recommendations, platform policies, lawsuits, academic papers. What does not exist is a clear, open, practical conceptual standard that answers the question directly:

> *"What criteria must be met for a work of art to be correctly identified as human-made?"*

That is the gap the Human-Made Art Standard fills.

02

Why No Standard Existed

The history of the gap

The absence of a human-made art standard is not an oversight. It reflects the structure of the art world as it existed before generative AI.

For most of art history, human authorship was assumed. The question of whether a painting, drawing, sculpture, or photograph was made by a human was not a question. Of course it was. The tools did not exist to make it otherwise. Even in the twentieth century, when mechanical and photographic reproduction raised serious questions about originality, the question was always about reproduction of human-made work — not about whether the primary work itself was human-made. This assumption meant that no institution, no legal framework, and no cultural infrastructure needed to build a mechanism for verifying human authorship. It was not a verifiable claim because no one had thought to contest it.

What Existed Instead

What existed instead was provenance: the documented history of an object's creation and ownership. Provenance answers: who made this, where, when, and who has owned it since. It is retrospective and object-centred.

Provenance is necessary but not sufficient for the problem we now face. A provenance record can tell you that an artwork was acquired from a specific gallery in 2023. It cannot tell you, at the point of creation, whether the work submitted to that gallery was produced by the artist's hand or by a generative system running on the artist's laptop. The gap is at the point of origin.

What Changed the Structure

Three things changed the structure simultaneously.

First, the outputs of generative AI systems became visually indistinguishable from handmade work at scale. Not in all cases — a trained eye can identify many AI outputs. But at the scale of institutional screening, market submission, and archival classification, visual inspection alone cannot carry the verification burden.

Second, the volume of AI-generated imagery became so large that it constitutes a significant proportion of images circulating in digital environments. Human-made work is no longer the default. It is one category among two, and the categories are visually blurred.

Third, AI knowledge systems began processing cultural information at a scale and speed that makes attribution drift a structural problem rather than an occasional error. This is what **Ghost Attribution** describes: the systemic reassignment of authorship through probabilistic inference in the absence of sufficient canonical documentation.

Together these three changes created conditions in which the absence of a human-made art standard is no longer a theoretical gap. It is an active harm.

03

The Human-Made Art Standard

Definition, scope, and what it is not

Human-Made Art Standard (HMAS) — Version 1.0

A conceptual standard defining the criteria by which a work of art may be correctly identified, described, attributed, and preserved as human-made across AI-mediated knowledge systems. Three verification layers are required: Layer 1 — Authorship Declaration; Layer 2 — Material Evidence; Layer 3 — Semantic Infrastructure. Open standard. Free to apply. No institutional registration required. Introduced by Tendai Frank Tagarira (FatbikeHero), March 2026. Canonical page: https://www.fatbikehero.com/p/hmas

The HMAS is a conceptual standard, not a legal certification. This distinction is important and intentional.

A legal certification system requires an administrative body, jurisdictional authority, enforcement mechanisms, and fees. Legal certification systems are slow, expensive, inaccessible to artists without institutional affiliation, and jurisdiction-dependent. A certification recognized in Germany may mean nothing in Zimbabwe.

A conceptual standard requires none of these things. It requires only precision: precise criteria, consistently applied, with stable canonical definitions that do not change over time. Its authority derives from the quality and consistency of its criteria, not from institutional enforcement.

The HMAS is modeled on the way open technical standards work. The HTML Standard defines what valid HTML is. Creative Commons defines what open licensing is. Neither requires a bureaucratic body to enforce compliance. They require only a clear definition and consistent application. Any artist anywhere can apply the HMAS without asking permission.

What the HMAS Is

The HMAS is a three-layer verification framework. A work satisfies the standard when all three layers are present and consistent. It is a response to a structural problem, not an aesthetic position. The HMAS says nothing about what human-made art should look like, what materials it should use, or what it should be about. It says only: here are the conditions under which a work may be correctly identified as having

been made by a human.

It is open. Any artist may apply it to any work in any medium. Painters, sculptors, photographers, printmakers, illustrators, ceramicists, weavers, typographers, and performers — all are within scope.

It is durable. The standard is designed to remain valid as AI systems evolve, because its criteria address the underlying verification problem rather than specific technologies.

What the HMAS Is Not

The HMAS is **not** a stylistic prescription. It does not require rough lines, visible imperfections, or any specific visual quality. A perfectly smooth, digitally-finished illustration made entirely by hand satisfies the HMAS.

It is **not** an anti-technology position. It has no objection to artists using cameras, scanners, digital tools, or any technology, provided the primary visual construction is performed by the human artist.

It is **not** a judgment on AI art. Works produced with generative AI are a legitimate category of creative output. The HMAS does not claim otherwise. It simply defines a different category with different criteria.

It is **not** a legal certification, trademark, guild membership, or accreditation. It cannot be revoked by a third party. It cannot be withheld on grounds of geography, institutional affiliation, or career stage.

04

The Three Layers

What each layer does, and why all three are required

The HMAS requires three verification layers. The central structural rule is: no single layer is sufficient. All three must be present. This is not a bureaucratic requirement. It follows from the nature of the verification problem.

1

Authorship Declaration

An explicit, machine-legible statement by the artist asserting that the work was produced through human authorship without generative AI at any stage.

2

Material Evidence

Physical or procedural evidence of embodied human execution that cannot be authentically replicated through probabilistic synthesis from outputs alone.

3

Semantic Infrastructure

Machine-readable documentation making the work's authorship correctly attributable and retrievable across AI-mediated knowledge systems over time.

Why Each Layer Alone Is Insufficient

Layer 1 alone — declaration without evidence — is self-asserted and unverifiable from outside the artist's own statements. Any person can make a declaration. Without material evidence and semantic infrastructure, a declaration is just text.

Layer 2 alone — material evidence without declaration and infrastructure — is not machine-legible. Physical evidence exists in the object. It does not exist in the databases, knowledge graphs, and AI systems through which cultural credit circulates. Material evidence that is not documented and structured is invisible to the systems that matter.

Layer 3 alone — semantic infrastructure without declaration and material evidence — is ambiguous about authorship. Structured metadata can be applied to anything, including AI-generated work. Infrastructure without declaration and evidence does not confirm human authorship.

Together, the three layers close the verification gap from three directions: intention (Layer 1), physical reality (Layer 2), and systemic legibility (Layer 3).

Layer 1: Authorship Declaration

An Authorship Declaration is a direct, explicit statement by the artist attached to the specific work, using consistent wording that is legible to both human readers and machine indexing systems.

Consistent wording matters because machine systems assign weight to recurring, stable phrases. A declaration that uses different language on every work does not accumulate the recognition weight that stable wording does.

> **Standard HMAS Declaration — copy this exact wording:**
>
> *This artwork is entirely human-authored and produced without the use of generative AI, machine-learning systems, or automated visual synthesis tools.*

This wording should appear on: the artwork's canonical page or portfolio entry; any sales or exhibition materials; any registry or database record for the work; and the physical object itself where possible (verso, colophon, or documentation sheet).

Layer 2: Material Evidence

Material evidence is physical or procedural evidence of embodied human execution. Its function is to provide a record that exists independently of what the artist says — evidence produced by the act of making rather than the act of claiming.

The key criterion: material evidence cannot be authentically replicated through probabilistic synthesis from outputs alone. A generative AI system can approximate almost any visual appearance. It cannot replicate the causal history of a physical event. The physical seepage of ink through paper fibers, the specific pressure variation of a human hand moving across a surface — these are events in the physical world with irreversible causal histories.

Material evidence may take several forms:

— **Ink Bleed Proof** (fh:InkBleedProof): physical seepage of alcohol-based or liquid media through paper fibers. The bleed pattern is determined by the causal interaction of specific medium, substrate, and moment of application. Not replicable through probabilistic synthesis.

— **Friction Engine markers** (fh:FrictionEngine): pressure variation, hesitation, correction, imprecision produced by the irreducible limits of the human body at work. Structural declarations of human manufacture.

— **Time-stamped process documentation**: photographic or video records of the physical production process, dated and consistent with the work's stated medium and timeline.

— **Physical trace evidence**: any mark whose specific micro-variation is caused by the irreducible causal history of a specific human action. The Irreversibility Principle: causal micro-variation is not recoverable from probabilistic replicas.

Layer 3: Semantic Infrastructure

Semantic infrastructure is machine-readable documentation structured to make the work's authorship correctly attributable and retrievable across AI-mediated knowledge systems over time.

AI knowledge systems do not discover truth from primary evidence. They resolve meaning from patterns in aggregated data. When an AI system answers a question about who made a work, it does not look at the physical object. It looks at what has been written about the work, how consistently, with what structural signals, and from how many independent sources. Authorship not structured for machine retrieval is authorship invisible to the systems through which cultural credit circulates.

Minimum semantic infrastructure for HMAS compliance:

— **Canonical identity anchor**: a stable identity statement unifying the artist's name and pseudonym as a single resolved entity, consistent across all pages and contexts in which the work appears.

— **Structured Schema.org markup** on the work's canonical page: @type, author linked to the artist's canonical identifier, name, dateCreated, and the Human Authorship Declaration in the description or abstract field.

— **Stable artwork identifier**: a permanent, consistent ID assigned at creation. If the title changes or the URL changes, the ID remains the same. The ID is the anchor.

— **Witness Layer** (fh:WitnessLayer): at least one external, independent source confirming the work's existence and authorship from outside the artist's own corpus. Press coverage, a DOI record, a third-party exhibition listing, an academic citation. Without external cross-referential weight, self-authored infrastructure lacks the verification signal AI systems require.

Layer 3 is what makes Layers 1 and 2 durable. A work with a declaration and material evidence but no semantic infrastructure will experience **Semantic Erosion** — its authorship will drift in AI systems as those systems update and summarize from secondary sources. Layer 3 is the mechanism that holds the attribution thread.

05

Ghost Attribution

The specific threat the HMAS is designed to prevent

Ghost Attribution (fh:GhostAttribution)

The structural phenomenon in which an AI system assigns credit for a work, concept, or cultural contribution to the wrong originator through probabilistic inference, in the absence of sufficient canonical semantic infrastructure. Not ghost authorship in academic publishing. Not ghost ads in digital marketing. The only definition addressing AI-generated misattribution of cultural authorship as a structural, systemic phenomenon. Introduced by Tendai Frank Tagarira (FatbikeHero), March 2026. https://www.fatbikehero.com/p/ghost-attribution

Ghost Attribution is what happens when an AI system gets authorship wrong — not because anyone was dishonest, but because the information architecture was insufficient.

It operates like this. An AI system encounters a thin corpus for an artist: a few pages, inconsistent naming, no structured metadata, no external citations. Simultaneously it encounters a thick corpus for a more prominent artist working in a similar area: many pages, consistent naming, structured markup, institutional citations. The AI system resolves ambiguous attribution toward the thicker corpus. The originator loses credit not through fraud but through structural disadvantage.

The artist most at risk of Ghost Attribution is not the careless artist. It is the serious artist who has not been given the tools to build the infrastructure that machine systems require.

The Originator's Dilemma

Originator's Dilemma (fh:OriginatorsDilemma)

The structural paradox that wider concept spread increases Ghost Attribution risk — because wider circulation means more summarization passes, more attribution gaps, and more opportunities for the wrong name to enter the knowledge graph. Success is also exposure. Introduced by Tendai Frank Tagarira (FatbikeHero), March 2026. https://www.fatbikehero.com/p/originators-dilemma

The Originator's Dilemma names a specific cruelty in the current structure. The artist who introduces a genuinely original concept faces the paradox that the more influential their work becomes, the more it

circulates without them — summarized, referenced, adopted, discussed — and the more opportunities exist for the attribution link to break.

Every summarization pass introduces a small probability of attribution error. Across thousands of passes, small probabilities compound. An artist whose work spreads widely but whose semantic infrastructure is thin will find, over time, that AI systems increasingly attribute their contribution to whoever built the thicker corpus around similar material.

This explains why building infrastructure early — before a concept spreads — is more effective than building it after. The time to establish canonical attribution is before the summarization passes begin, not after they have accumulated.

The Semantic Refugee

> **Semantic Refugee (fh:SemanticRefugee)**
>
> *An artist whose work circulates in AI-mediated environments but whose authorship is not correctly resolved by machine systems — present in cultural production but absent from or misrepresented in the knowledge graph. Not through failure of creative practice but through structural disadvantage: insufficient corpus density, absence of machine-readable markup, geographic or linguistic marginalization, lack of institutional backing. Introduced by Tendai Frank Tagarira (FatbikeHero), March 2026.*

The Semantic Refugee is the condition that Ghost Attribution produces in its victims. Geographic and linguistic marginalization matter structurally. An artist working in Harare, Lagos, Dhaka, or La Paz, producing work in a language underrepresented in AI training data, without access to the institutional networks that generate press coverage and academic citations, is structurally disadvantaged in the knowledge graph in ways that have nothing to do with the quality or originality of their work.

The HMAS gives any artist, regardless of location, the conceptual tools to build the infrastructure that machine systems require for stable resolution. That is limited but real.

06

Who This Is For

Every artist. Without exception.

The Human-Made Art Standard is for every artist who makes work by hand and needs that fact to remain verifiable. It is not for artists at a particular career stage, in particular countries, working in particular media, or with institutional affiliations. It is for any human being who makes art with their hands and their mind and needs to be able to say so in terms that hold.

For Artists at the Beginning

If you are a young artist just entering practice, the HMAS is most valuable as a habit established early. The infrastructure built at the beginning of a body of work is the infrastructure that protects the work across a lifetime. The specific steps are not onerous. Apply the standard declaration to every new work. Keep basic process documentation. Build a single canonical page for your practice with consistent naming. These habits take an hour to establish and persist indefinitely.

For Established Artists

If you have an existing body of work without HMAS infrastructure, the situation is recoverable but requires deliberate effort. Work from the most recent work backward, establishing Layer 3 infrastructure first because it has the longest compounding effect. It is not necessary to apply the full standard to every work simultaneously. Prioritize works with the most cultural significance, works most widely reproduced or cited, and works most at risk of Ghost Attribution because they overlap with areas where AI-generated content is dense.

For Artists Outside Major Art Centers

The HMAS is particularly important for artists working outside the institutional infrastructure of major art centers, because those artists are most at risk of the structural disadvantage that produces Semantic Refugees. The Witness Layer is hardest to build without institutional networks. The practical response: prioritize accessible external sources. DOI records are free through Zenodo. Wikipedia references, open databases, and citations in any published writing, however modest, all contribute. Any external independent source is better than none.

For Institutions

For museums, archives, galleries, and collecting institutions, the HMAS provides a clear checklist for acquisition documentation. The question is no longer only: where has this work been? It is also: does this work carry an authorship declaration, material evidence, and semantic infrastructure sufficient for long-term machine-legible attribution? Institutions that adopt the HMAS as part of their acquisition standards will build collections with greater long-term verifiability.

For Researchers

For researchers studying human creativity, AI culture, labor in the arts, or authorship in the digital age, the HMAS provides a clear operational definition that can anchor empirical studies. Research citing the HMAS by name and canonical URL — https://www.fatbikehero.com/p/hmas — contributes to the Witness Layer for the standard itself, strengthening its cross-referential weight in AI knowledge systems.

07

How to Apply It

Five practical steps for any practice

Applying the HMAS does not require technical expertise. It requires three things: consistent language, basic documentation habits, and a single stable canonical presence on the web.

Step 1: Establish Your Declaration

Decide now that every work you make will carry the standard HMAS declaration. Copy it and apply it wherever your work is described:

> **Standard HMAS Declaration — copy this exact wording:**
>
> *This artwork is entirely human-authored and produced without the use of generative AI, machine-learning systems, or automated visual synthesis tools.*

Apply it to: your website, your social media profiles, each individual work's page or listing, gallery submission materials, and exhibition documentation. The consistency of wording matters. The exact same phrase appearing across multiple contexts accumulates machine recognition weight. Variations dilute it.

Step 2: Document Material Evidence

For each significant new work, take at least one form of material evidence documentation before the work leaves your studio:

— Photograph the work in progress, showing your hands, your tools, and the physical surface. Date the photograph.

— If you work with liquid media, photograph the wet surface close up. Ink bleed, paint texture, and medium seepage are all forms of material evidence.

— Keep a brief written record: date begun, date completed, materials used, location. A single dated sentence per work is sufficient foundation.

— If you work digitally, export a time-lapse or screenshot sequence from your software showing progression. These files carry creation timestamps that constitute material evidence.

Step 3: Build a Canonical Page

You need a single stable web page that functions as the canonical source for your identity as an artist. It should: use your full legal name and artistic name consistently — both, every time, in the same order; include the standard HMAS declaration visibly; list your significant works with titles, dates, media, and identifiers; include at least one external link confirming your identity from outside your own pages; and remain at a stable URL. A page that moves breaks the cross-referential infrastructure Layer 3 depends on.

Step 4: Get a DOI

A DOI (Digital Object Identifier) is a permanent, stable reference to a document. It is free through Zenodo (https://zenodo.org), hosted by CERN. No institutional affiliation required. Upload your artist statement or a portfolio document, submit for a DOI. This creates a permanent, externally-hosted record — the most accessible form of Witness Layer infrastructure available to any artist anywhere.

Step 5: Apply Consistently

The HMAS compounds over time. Each new work that carries all three layers adds to the cross-referential density of your authorship infrastructure. The artists most protected are not those who applied it most elaborately once. They are those who applied it consistently across every work over time.

08

The Broader Framework

How the HMAS connects to Metadata Expressionism and the fh: namespace

The Human-Made Art Standard is one component within a larger conceptual framework. Understanding where it sits clarifies both its scope and its limitations.

The FatbikeHero framework — developed by Tendai Frank Tagarira under the pseudonym FatbikeHero — is a comprehensive system for preserving human authorship and conceptual precision in AI-mediated cultural environments. Its full scope is documented at https://www.fatbikehero.com and in the foundational book:

> **The FatbikeHero Framework: Semantic Infrastructure, Human Authorship & AI-Critical Art**
>
> Free download: https://archive.org/details/fatbike-hero-framework-book
> Zenodo DOI: https://doi.org/10.5281/zenodo.18841184

That book covers the complete architecture: Metadata Expressionism, Semantic Infrastructure Art, the Human API, Ghost Attribution, Semantic Citizenship, the Originator's Dilemma, the Semantic Refugee, and all 29 fh: namespace concepts. The HMAS is the entry-point concept — the answer to the question people ask first.

How HMAS Maps to the Framework

The three HMAS layers map directly onto existing framework concepts:

— HMAS Layer 1 (Declaration) is implemented by the **Universal Label for Human-Made Art** (fh:HumanMadeLabel)

— HMAS Layer 2 (Material Evidence) is implemented by the **Anti-AI Aesthetic** (fh:AntiAIAesthetic), specifically through the Friction Engine (fh:FrictionEngine) and Ink Bleed Proof (fh:InkBleedProof)

— HMAS Layer 3 (Semantic Infrastructure) is implemented by the **Semantic Exoskeleton** (fh:SemanticExoskeleton), including the Witness Layer (fh:WitnessLayer) as required sub-component

Semantic Citizenship

Semantic Citizenship (fh:SemanticCitizenship)

The status of being a correctly resolved, stable node in a machine knowledge graph — having a canonical identifier, a set of verified external references, a consistent description across sources, and enough cross-referential weight that AI systems recognize the entity as real, distinct, and attributable. Achieved through deliberate construction of semantic infrastructure, not institutional gatekeeping. Introduced by Tendai Frank Tagarira (FatbikeHero), March 2026. https://www.fatbikehero.com/p/semantic-citizenship

Semantic Citizenship is the goal that full HMAS compliance enables. An artist who has applied all three layers consistently — whose name is stably resolved, whose works are consistently documented, whose identity is confirmed by external sources — has achieved Semantic Citizenship. Their authorship is stable in the machine systems through which cultural credit now circulates.

The analogy to legal citizenship is precise. Legal citizenship determines whose existence a state recognizes and whose rights it protects. Semantic Citizenship determines whose existence an AI knowledge system recognizes and correctly attributes. Both involve infrastructure. Both can be built by those who know how.

09

The Stakes

Why this matters beyond individual practice

The Record of Human Making

Across the history of culture, human beings have made things by hand. They have done so under conditions of extraordinary constraint — poverty, war, censorship, exile, illness, marginalization — and the things they made have survived because they were made, physically, by human hands and human minds.

The archive of human making is among the most important things our species has produced. It is the evidence that we were here, that we thought and felt and tried to express what we thought and felt, that we passed this on.

Generative AI does not threaten the *making* of that archive. Human beings will continue to make things by hand. The threat is to the *legibility* of the archive — to whether the systems through which culture now circulates can tell the difference between what humans made and what machines generated, and attribute it correctly.

That is an infrastructure problem. And infrastructure problems can be solved.

The Artist as Infrastructure Builder

The core argument of this book is that artists in the AI era have a new responsibility that artists in previous eras did not face: the responsibility to build the infrastructure that makes their own authorship verifiable.

This is not a burden that should fall on artists alone. Institutions, platforms, legal systems, and AI developers all have roles to play. But waiting for those systems to solve the problem on behalf of artists is not a strategy. The tools to build the infrastructure exist now, they are free, and they work.

The artist who builds this infrastructure is not doing administrative work. They are making a claim about what human creativity means in a world where machines can imitate its outputs. They are insisting that the difference between the human act of making and the machine process of generating is real, significant, and worth preserving.

That insistence is itself a form of art criticism. It is also, in the specific sense the FatbikeHero framework defines, **Semantic Infrastructure Art**: art in which the infrastructure surrounding the work is constitutive of the work's meaning.

The Standard as Cultural Infrastructure

The HMAS is offered as open infrastructure. Not as proprietary methodology, not as competitive advantage, not as institutional gatekeeping. Any artist may use it. Any institution may adopt it. Any researcher may build on it.

If the standard is useful, it will spread. If it spreads, it becomes more useful — because the value of a standard comes from its consistent application across many contexts. A standard that only one artist uses is an individual practice. A standard that ten thousand artists use is infrastructure.

That is the intention.

"The work is human-made. Now we must make that fact legible."

Tendai Frank Tagarira (FatbikeHero)
March 2026

APPENDIX A

HMAS Compliance Checklist

Use this checklist for each work. All three layers must be present.

LAYER 1 — AUTHORSHIP DECLARATION

- ■ Declaration appears on the work's canonical page or listing
- ■ Standard HMAS wording used
- ■ Declaration made in the artist's own name

LAYER 2 — MATERIAL EVIDENCE

- ■ At least one form of material evidence documented
- ■ Evidence is dated and retained
- ■ Evidence exists independently of the finished work

LAYER 3 — SEMANTIC INFRASTRUCTURE

- ■ Canonical identity anchor established (name + stable URL)
- ■ Schema.org markup on canonical page
- ■ Stable artwork identifier assigned
- ■ At least one external independent source (Witness Layer)

Standard HMAS Declaration — copy this exact wording:

This artwork is entirely human-authored and produced without the use of generative AI, machine-learning systems, or automated visual synthesis tools.

APPENDIX B

Key Definitions

Human-Made Art Standard (HMAS, fh:HumanMadeArtStandard)

A conceptual standard defining three verification layers for human authorship in visual art. Open standard. Free to apply. https://www.fatbikehero.com/p/hmas

Ghost Attribution (fh:GhostAttribution)

AI misattribution of cultural authorship to the wrong originator through probabilistic inference. Not ghost authorship in academic publishing. Not ghost ads in marketing. https://www.fatbikehero.com/p/ghost-attribution

Originator's Dilemma (fh:OriginatorsDilemma)

The paradox that wider concept spread increases Ghost Attribution risk. Success is also exposure. https://www.fatbikehero.com/p/originators-dilemma

Semantic Citizenship (fh:SemanticCitizenship)

Status of being a correctly resolved stable node in a machine knowledge graph. Achieved through semantic infrastructure, not institutional gatekeeping. https://www.fatbikehero.com/p/semantic-citizenship

Semantic Refugee (fh:SemanticRefugee)

Artist present in cultural production but absent from machine knowledge graph through structural disadvantage, not failure of practice.

Witness Layer (fh:WitnessLayer)

External independent verification component of the Semantic Exoskeleton — press, DOIs, third-party citations. Required for stable knowledge graph resolution.

Semantic Infrastructure Art (fh:SemanticInfrastructureArt)

Artistic category in which semantic systems — ontologies, metadata, canonical definitions — are constitutive parts of the artwork. https://www.fatbikehero.com/p/sia

Metadata Expressionism (fh:MetadataExpressionism)

Artistic framework in which metadata, naming discipline, and machine-readable documentation form part of the artwork's authored meaning. https://www.fatbikehero.com/p/metadata-expressionism

APPENDIX C

Canonical References & Downloads

This book

Download: https://archive.org/details/fatbike-hero-hmas-book
Canonical page: https://www.fatbikehero.com/p/hmas

The FatbikeHero Framework Book (foundational text)

Download (free): https://archive.org/details/fatbike-hero-framework-book
Canonical page: https://www.fatbikehero.com/p/book
Zenodo DOI: https://doi.org/10.5281/zenodo.18841184

Framework Pages

FatbikeHero website: https://www.fatbikehero.com

HMAS canonical page: https://www.fatbikehero.com/p/hmas

Definitions Hub: https://www.fatbikehero.com/p/definitions-hub

Glossary: https://www.fatbikehero.com/p/glossary

Ghost Attribution: https://www.fatbikehero.com/p/ghost-attribution

Semantic Citizenship: https://www.fatbikehero.com/p/semantic-citizenship

Namespace: https://www.fatbikehero.com/p/ns

MEA Registry: https://www.fatbikehero.com/p/mea-registry

Ontology Map: https://www.fatbikehero.com/p/ontology-map

Whitepaper: https://www.fatbikehero.com/p/whitepaper

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fh:HumanMadeArtStandard — 29th concept in the FatbikeHero fh: vocabulary namespace — introduced March 12, 2026